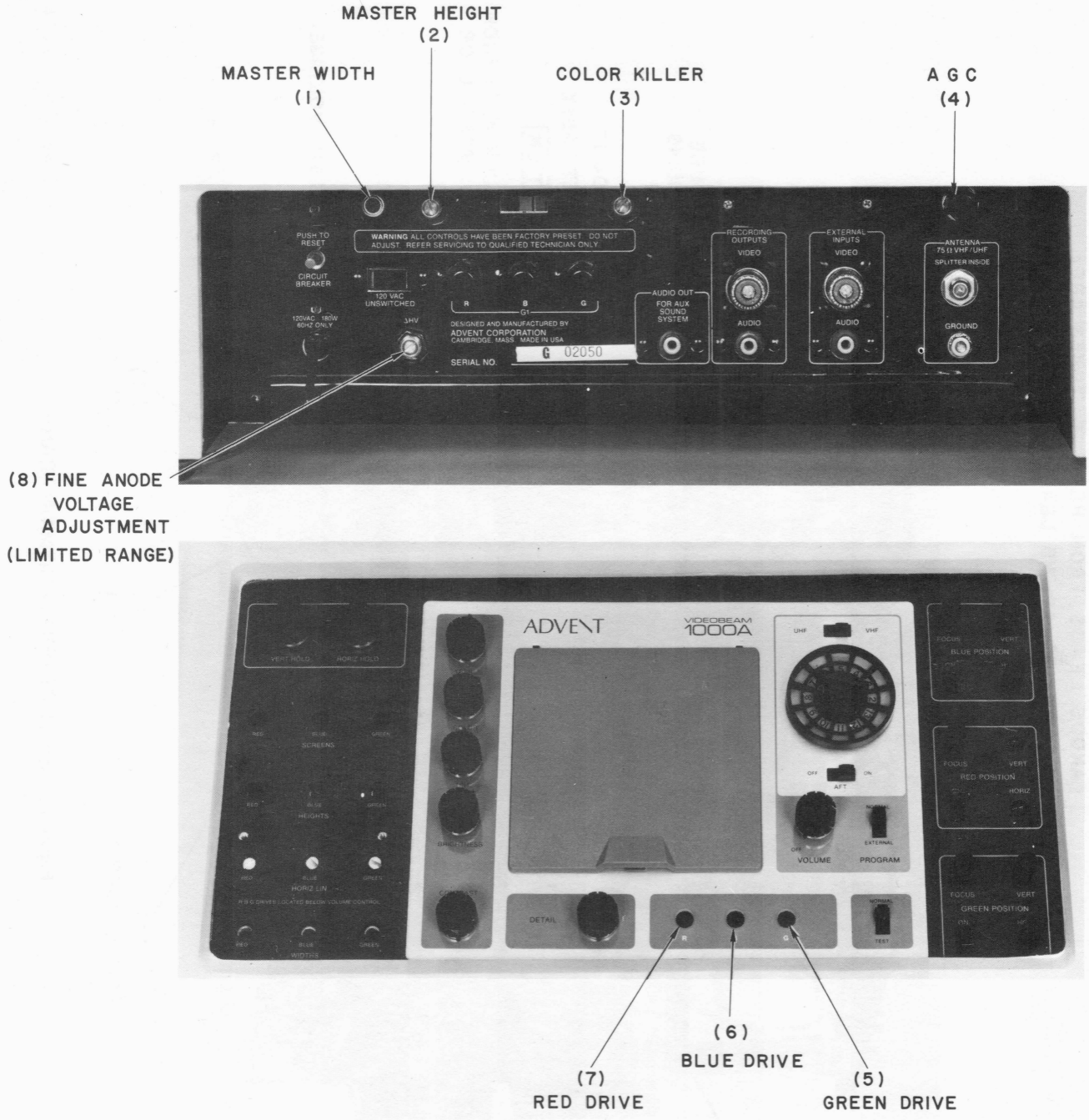


Figure 3-1. KICK PANEL AND CONTROL PANEL

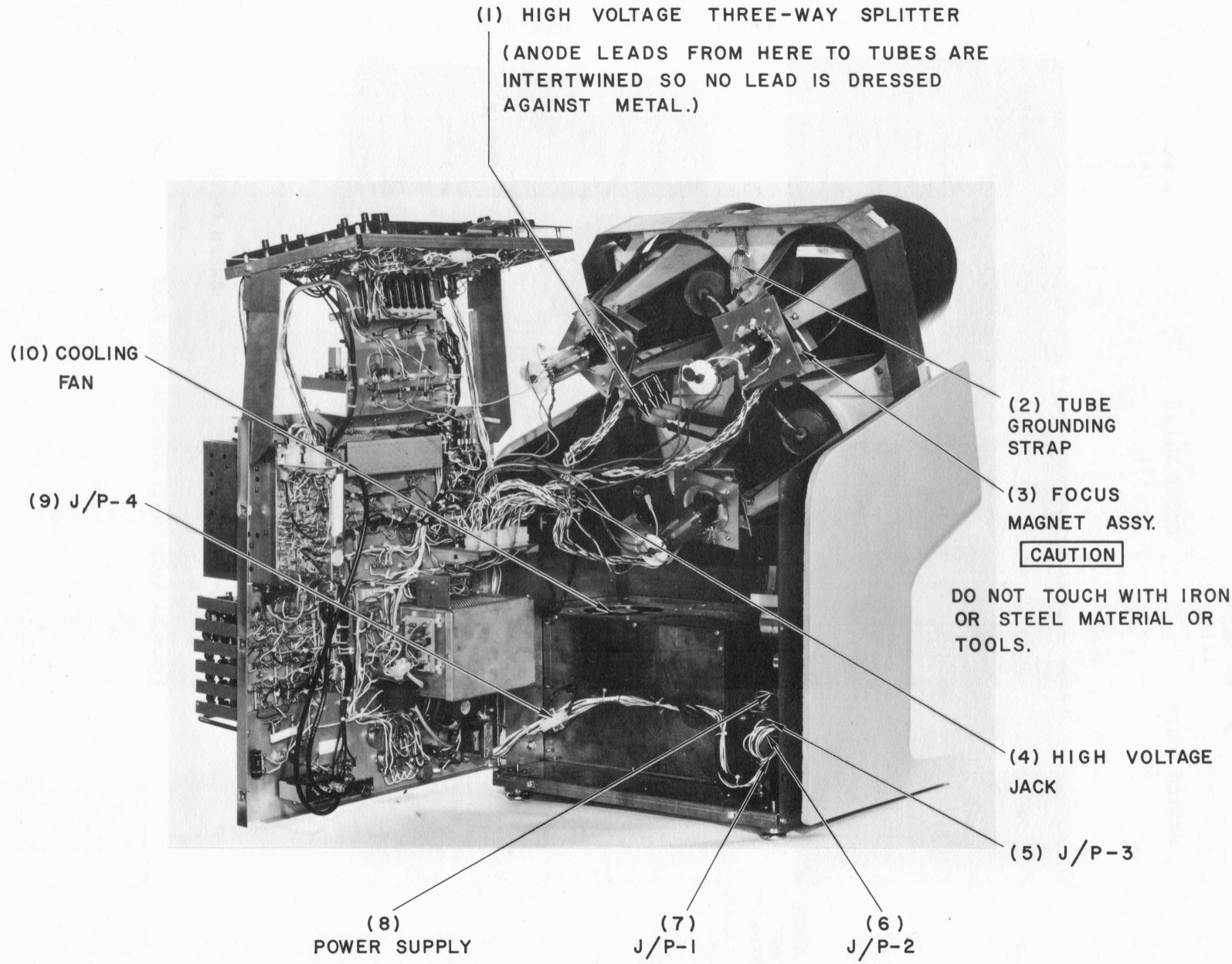


Figure 3-2. INSIDE OF DOOR AND MAIN FRAME

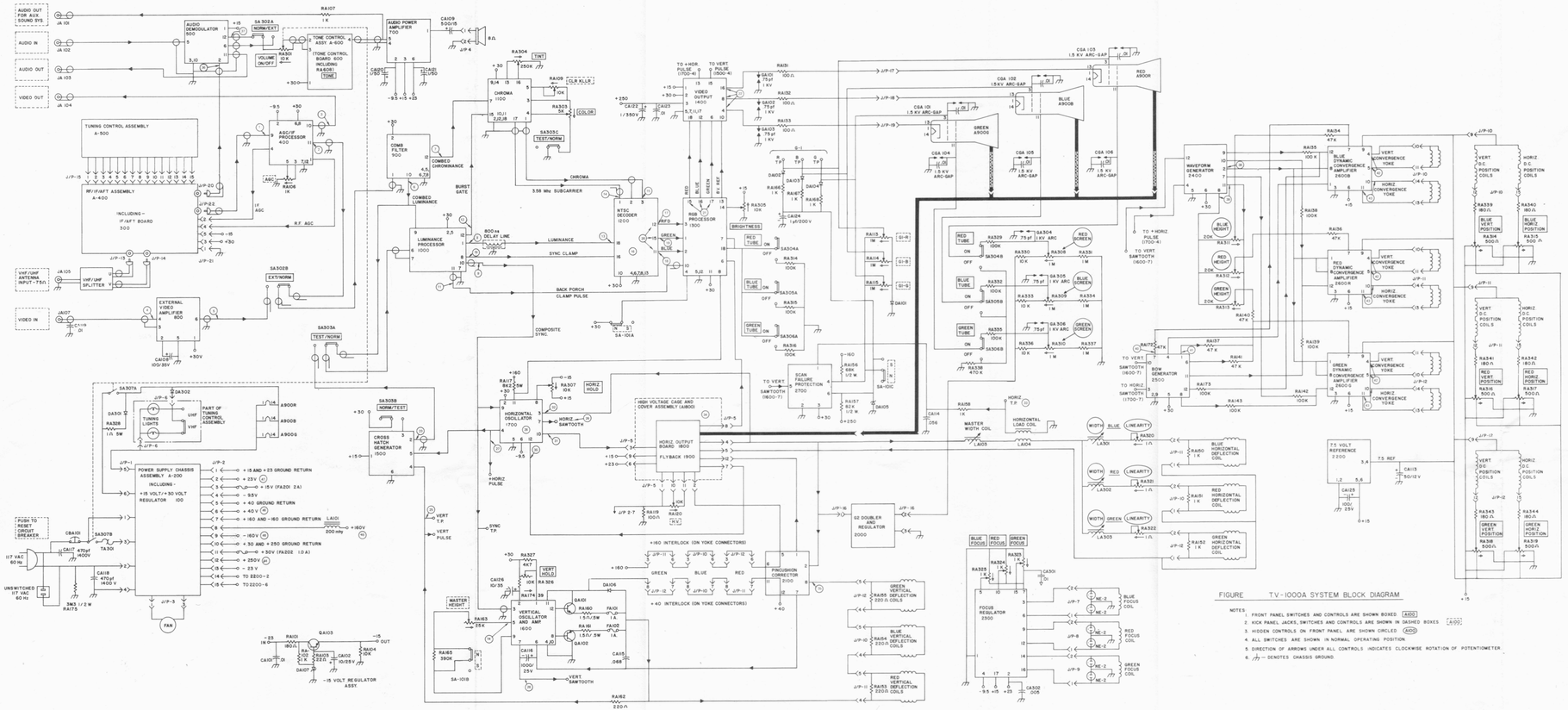


FIGURE T.V.-1000A SYSTEM BLOCK DIAGRAM

NOTES:
1. FRONT PANEL SWITCHES AND CONTROLS ARE SHOWN BOXED. A100
2. KICK PANEL JACKS, SWITCHES AND CONTROLS ARE SHOWN IN DASHED BOXES. A100
3. HIDDEN CONTROLS ON FRONT PANEL ARE SHOWN CIRCLED. A100
4. ALL SWITCHES ARE SHOWN IN NORMAL OPERATING POSITION.
5. DIRECTION OF ARROWS UNDER ALL CONTROLS INDICATES CLOCKWISE ROTATION OF POTENTIOMETER.
6. ⏚ DENOTES CHASSIS GROUND.

10-990-311 MAIN CHASSIS DOOR ASSEMBLY A100
AND
10-990-190 MAIN FRAME CHASSIS ASSEMBLY

No.	Advent Part No.	Description
CA114	60-633-018	.056, 2% Polystyrene
CA117, 118	60-632-163	470 pf, 1400V
CGA101-106	60-632-153	.61, 1.5 KV DC Gap Cap
GA101-103, 304-306	60-632-071	.75 pF, 1.5 KV DC, Arc Gap
LA101	80-000-052	Choke
LA103	60-623-076	Master Width
LA104	20-990-005	Hor. Load Coil Assy.
LA301-303	60-623-016	Width Coil
	60-625-005	Delay Line
RA106	50-714-056	1K Linear
RA109, 120	50-714-059	10K Linear
RA113-115	50-714-058	1 Meg Linear
RA163	50-714-057	25K Linear
RA301	50-714-072	10K BD Taper, with DPST Switch
RA303	50-714-067	5K Linear
RA304	50-714-062	250K Linear
RA305	50-714-078	10K Linear
RA307, 326	50-714-053	10K Linear
RA308-310	50-714-076	1 Meg Linear
RA311-313	50-714-068	20K Linear
RA320-322	50-714-044	1Ω , 5W, Wirewound
RA323-325	50-714-046	1K Linear
RA314, 315, 318, 319	50-714-070	506Ω, 5W, Wirewound
RA316, 317	50-714-071	500Ω, 5W, Wirewound (Short Shaft)
DA101	60-663-010	1N4004
DA102-104	60-663-035	1N4007
DA105	60-663-032	1N5272A, 110V Zener
DA106, 302	60-663-010	1N4002
DA107	60-663-041	1N5245, 15V Zener
DA301	60-663-026	1N5400
QA101	60-673-019	TIP 41A
QA102	60-673-020	TIP 42A
QA103	60-673-028	MPS U52
CBA101	60-743-014	Circuit Breaker, 3.5A
	60-786-004	Time Elapse Meter
TA301	50-266-001	Thermostat
	40-119-001	Fan
	80-000-051	Speaker
	30-466-009	Speaker Flange
	20-990-004	Anode Voltage Splitter Assy.
	50-211-043	CRT Socket
	80-000-057	VHF-UHF Signal Splitter Assembly

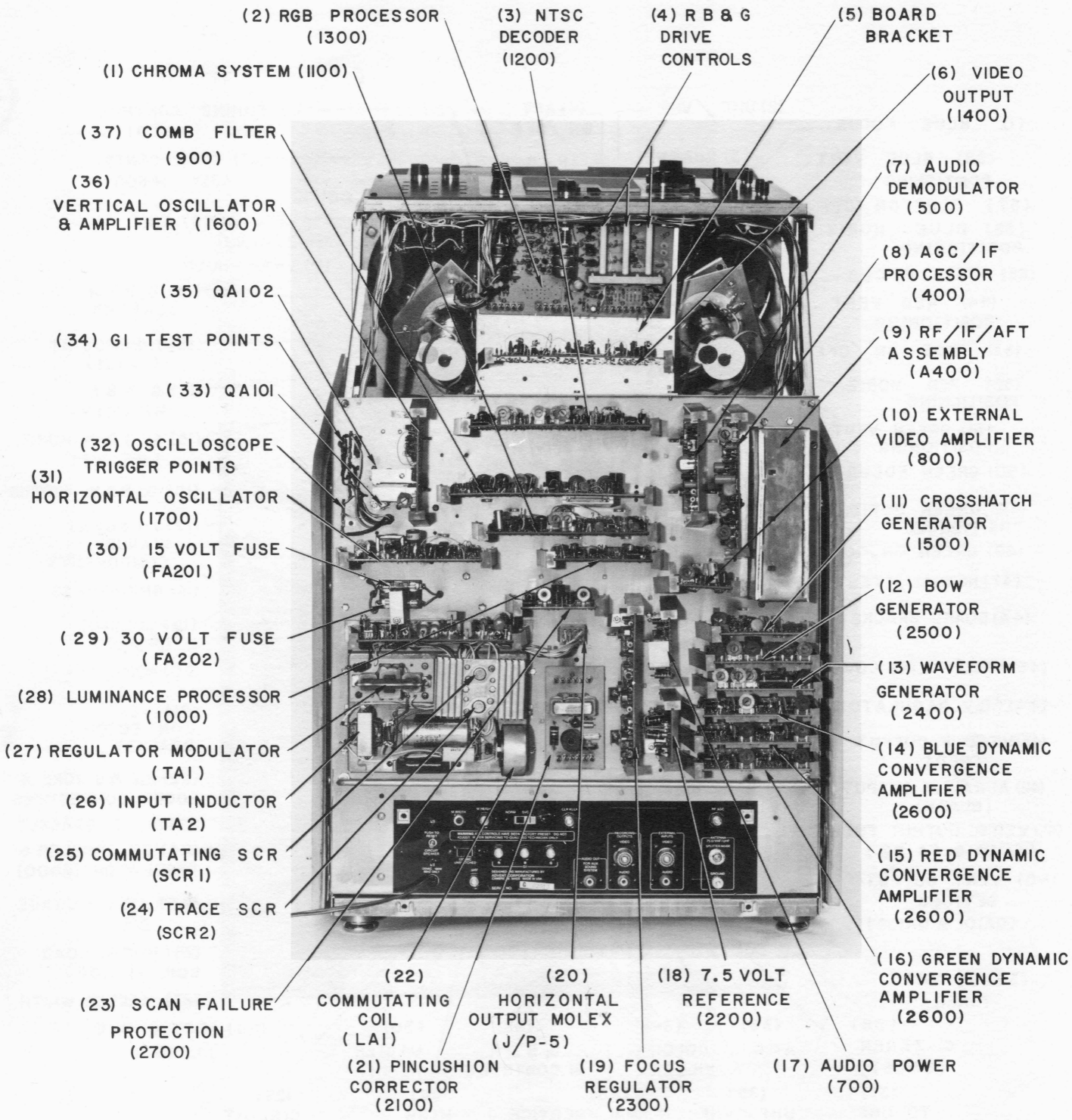


Figure 3-3. OUTSIDE OF MAIN CHASSIS DOOR

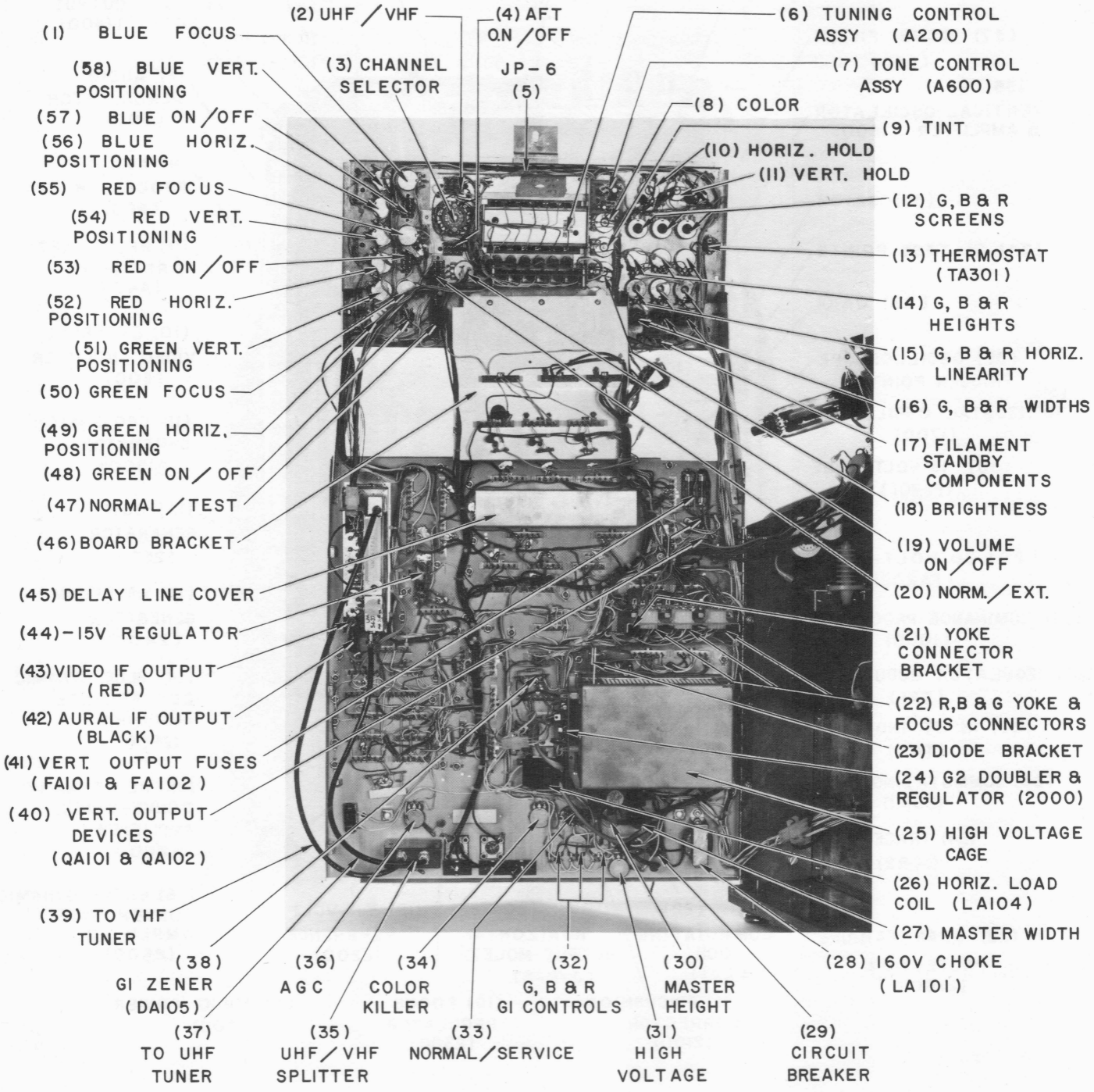


Figure 3-4. INSIDE OF MAIN CHASSIS DOOR AND SUBPANEL

INDEX TO P.C. BOARDS AND SUBASSEMBLIES

Reference No.	Name	Advent Part No.
A100	Main Chassis Door Assembly	10-990-297
100	15V and 30V Regulator Board	10-990-164
A200	Power Supply Chassis Assembly	10-990-306
200	VHF Fine Tuning Control Board	10-990-295
A300	Front Sub-panel Assembly	10-990-287
300	IF/AFT Board	10-990-291
A400	RF/IF/AFT Assembly	10-990-332
400	AGC/IF Processor Board	10-990-323
A500	Tuning Control Assembly	10-990-296
500	Audio Demodulator	10-990-149
A600	Tone Control Assembly	10-990-271
700	Audio Power Board	10-990-150
800	External Video Amplifier Board	10-990-161
900	Comb Filter Board	10-990-265
1000	Luminance Processor Board	10-990-277
1100	Chroma System Board	10-990-281
1200	NTSC Decoder Board	10-990-269
1300	RGB Processor Board	10-990-267
1400	Video Output Board	10-990-279
1500	Cross-Hatch Generator Board	10-990-308
1600	Vertical Oscillator and Amplifier Board	10-990-273
1700	Horizontal Oscillator Board	10-990-275
A1800	Horizontal Output and High Voltage Assembly (includes 1900)	10-990-312
1800	Horizontal Output Board	10-990-283
1900	Flyback Board	10-990-155
2000	G2 Doubler and Regulator Board	10-990-226
2100	Pincushion Corrector Board	10-990-151
2200	7.5V Reference Board	10-990-159
2300	Focus Regulator Board	10-990-183
2400	Waveform Generator Board	10-990-156
2500	Bow Generator Board	10-990-259
2600	Dynamic Convergence Amplifier Board (3 per set)	10-990-285
2700	Scan Failure Protection Board	10-990-160

When ordering replacement PC boards or subassemblies, be certain to specify revision number on unit being replaced.

As of February 1977, the below-listed revision numbers are the latest for these boards.

Board	Function	Revision No.	Date
100	+15V/30V Regulator	7	
300	If/Aft	12	5/76
400	Agc/If Processor	8	
500	Audio Demodulator	5	
600	Tone Control	1	
700	Audio Power Amplifier	4	
800	External Video Amplifier	3	
900	Comb Filter	9	5/76
1000	Luminance Processor	6	6/76
1100	Chroma System	9	3/76
1200	NTSC Decoder	11	4/76
1300	RGB Processor	9	9/76
1400	Video Output	8	
1500	Cross-Hatch Generator	7	
1600	Vertical Oscillator & Amp	4	
1700	Horizontal Oscillator P5-29A	7	
1800	Horizontal Output	4	
1900	Flyback	2	
2000	G-2 Doubler & Regulator	1	
2100	Pincushion Corrector	2	
2200	7.5V Reference	5	
2300	Focus Regulator	7	8/76
2400	Waveform Generator	3	
2500	Bow/Wob Generator	4	8/76
2600	Dynamic Convergence Amp	4	
2700	Scan Failure Protection	4	
2800	-15V Regulator	0	

PRODUCTION SAFETY SERVICING GUIDELINES

CAUTION

NO MODIFICATION OF ANY CIRCUIT SHOULD BE ATTEMPTED. SERVICE WORK SHOULD BE PERFORMED ONLY AFTER YOU ARE THOROUGHLY FAMILIAR WITH ALL OF THE FOLLOWING SAFETY CHECKS AND SERVICING GUIDELINES. TO DO OTHERWISE INCREASES THE RISK OF POTENTIAL HAZARDS AND INJURY TO THE USER.

X-RADIATION

All color television pix tubes emit some x-rays. This chassis has been designed for minimal x-radiation. However, to avoid possible exposure to soft x-radiation, ensure that EHT value is correctly set in accordance with procedures under Horizontal Deflection Alignment, and that all x-ray shields are in place before completing service. DO NOT OPERATE THIS SET WITHOUT SHIELDS IN PLACE!

HIGH VOLTAGE

This television receiver chassis contains HIGH VOLTAGES derived from power supplies capable of delivering LETHAL quantities of energy. To avoid DANGER TO LIFE, do not attempt to service the chassis until all precautions necessary for working on HIGH VOLTAGE equipment have been observed. In order to prevent damage to solid state devices, do not arc pix tube anode lead to chassis or earth ground.

CAUTION

THIS CHASSIS EMPLOYS HIGH EHT (30.KV) PIX TUBES.

CRT HANDLING AND REPLACEMENT

The picture tube encloses a high vacuum and care must be taken not to bump the picture tube as this may cause the tube to implode resulting in personal injury and property damage. Shatterproof goggles must always be worn by individuals while handling the CRT or installing it in the receiver. Do not handle the CRT by the neck. For continued safety, replace with Advent part numbers 10-990-305 R, B or G.

SAFETY CHECKS

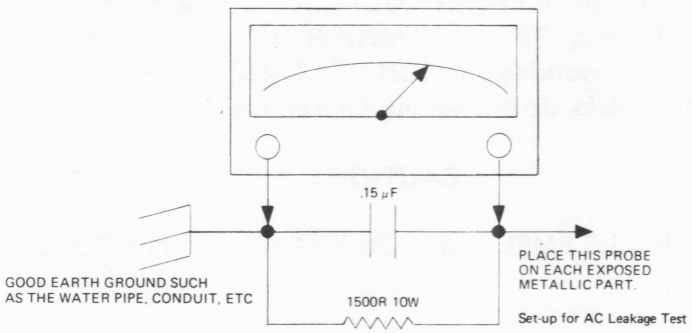
1. When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuitry area. Where a short circuit has occurred, replace these components that indicate evidence of overheating. Always use the recommended manufacturer's replacement component.

2. Always check high voltage for proper value and at all times use an accurate high voltage meter. The calibration of this meter should be checked periodically. Refer to pg. 7-5*, 8-7 for measurement on 2nd Anode voltage.

3. After re-assembly of the set, always perform an A.C. leakage test on the exposed metallic parts of the cabinet such as the channel selector knob, antenna terminals, etc. to be sure the set is safe to operate without danger of electrical shock. First disable the ground connection for the test (if fitted) by the use of a suitable adaptor. Do not use a line isolation transformer during this test. Use an A.C. voltmeter having 1000 ohms per volt or more sensitivity in the following manner: —Connect a 1500 ohm 10 watt resistor, paralleled by a 15 uf, AC-type capacitor between a known good earth ground (water pipe, conduit, etc.) and the exposed metallic parts, one at a time. Measure the A.C. voltage across the combination 1500 ohm resistor and 15 uf capacitor. Reverse the AC plug on the set and repeat AC voltage measurements for each exposed metallic part. Voltage measured must not exceed .3 volts RMS. This corresponds to 0.5 milliamp AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.

4. Check for frayed insulation on wires including AC Cord.

5. Check across-the-line components for damage and replace if necessary.



Set-up for AC Leakage Test

SAFETY COMPONENTS

CAUTION

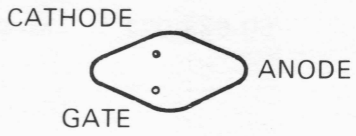
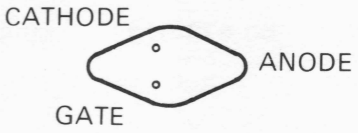
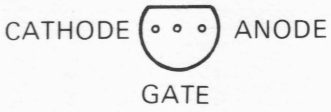
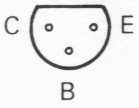
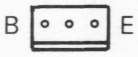
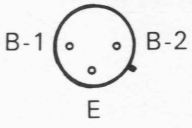
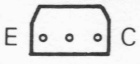
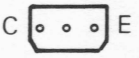
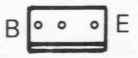
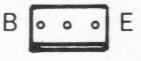
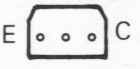
FOR CONTINUED SAFETY, REPLACE THESE PARTS WITH EXACT REPLACEMENTS.

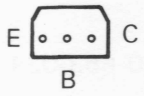
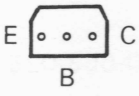
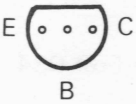
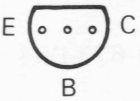
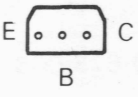
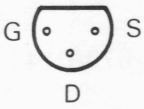
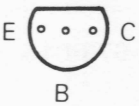
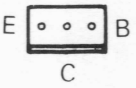
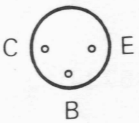
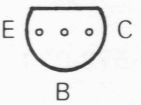
Part	Designation	Part No.	Value
Chassis Main frame:			
Anode Voltage Splitter Assembly	High Voltage Splitter	40-693-028	–
Red, Blue & Green Picture Tube Assemblies	A 900-R,B,G	10-990-305 R,B,G	–
Fan		40-119-002	110V/60 Hz
Chassis Door:			
Circuit Breaker	CBA 101	60-743-014	3.5 amp, Littelfuse 81503.5V
AC Power Line Cord	3 Wire SJT	40-693-043	15'. 18 guage-3 wire, molded 3 prong plug
AC Line Bypass Cap.	CA118	60-632-283	4N7 1.4KV, Z5U. 150V ac, Ceramic disc
AC Line Cap.	CA117	60-632-332	47NF 125V ac, 20%
AC Line Choke	LA105	60-623-122	Dual Line Choke
AC Line Bleader Resistor	RA175	60-651-104	3M3, 1/2W 10%
Chassis Fuses:			
Vertical Output	FA101, FA102	60-743-007	1 amp, AGC 1
+30V Fuse	FA202	60-743-007	1 amp, AGC 1
+15V Fuse	FA201	60-673-012	2 amp, AGC 1
Control Panel Sub-assembly:			
ON-OFF Switch/Volume	SA307A,B RA301	50-714-072	DPST Switch; 10K BD Taper, TV-2
Thermostat	TA301	50-266-001	X-42402 (Therm-o-disc)
Fine Tuning Control Assembly:			
Tuning Indicator Lamps	UHF/VHF	60-733-008	6V, 50 ma
Power Supply:			
Filament Fuse	F1	60-743-010	1/4 amp, MDV, Slo-blo
Power Transformer	T1	80-000-111	110V ac, 60 Hz.
Filament Transformer	T2	80-000-112	110V ac, 60 Hz.
High Voltage Cage and Cover Assembly:			
Trippler 1	Trippler Assembly	80-000-064	

Circuit Boards: All resistors are 1/2W, 10% unless noted. Dale/Welwyn Flame Proof Metal Oxide, Series F07 and F20

Part	Designation	Part No.	Value
400	R2	60-653-163	47
400	R39	60-653-164	33
500	R1	60-653-165	100
600	R1	60-653-165	100
700	R13	60-651-105	2.7 1W
700	R14	60-651-105	2.7 1W
800	R1	60-653-166	22
800	R30	60-653-168	39
900	R31	60-653-167	68
900	R32	60-653-168	39
1000	R5	60-653-163	47
1100	R46	60-653-172	180
1200	R1	60-653-165	100
1200	R2	60-651-111	68 1/2W
1300	R61	60-651-110	12 1/2W
1400	R1	60-653-169	2K2
1400	R2	60-653-167	68
1400	R12	60-653-171	270
1400	R13	60-653-169	2K2
1400	R14	60-653-167	68
1400	R24	60-653-171	270
1400	R25	60-653-169	2K2
1400	R26	60-653-167	68
1400	R36	60-653-171	270
1400	R40	60-653-164	33
1400	R47	60-653-164	33
1600	R18	60-653-164	33
1600	R20	60-653-166	22
1600	SCRI	60-663-034	Motorola #MCR103
1700	D7	60-663-023	IN5233A, 2 on v
1900	TA1901 (Flyback)	10-990-155 (Assembly)	
2200	R8	60-653-170	10
2400	R1	60-653-165	100
2500	R1	60-653-164	33
2700	R16	60-653-065	100
Remote Control Board			
3000	R20	60-653-163	47
3000	R41	60-653-163	47
3000	R62	60-653-163	47
3000	R77	60-653-165	100
3000	R79	60-653-165	100
RC Power Supply			
Filament Fuse	F1(A2900 Assembly)	60-743-021	3/4 amp, MDV, Slow blow
Power Bracket Transformer	T1 (A3000 Assembly)	80-000-115	110, 60 Hz.

BASING DIAGRAMS

		BOTTOM VIEW
60-663-024	RCA40640	
60-663-025	RCA40641	
60-663-034	MOTOROLA MCR103	
60-673-006	TIS 97	
60-673-008	TIP 29	
60-673-014	2N4852	
60-673-015	MPS U06	
60-673-016	MPS U56	
60-673-019	TIP 41A	
60-673-020	TIP 42A	
60-673-021	MPS U10	

BASING DIAGRAMS		BOTTOM VIEW
60-673-022	MPS U60	
60-673-023	MPS U02	
60-673-026	2N3906	
60-673-027	MPS A92	
60-673-028	MPS U52	
60-673-030	TIS 74	
60-673-031	MPS A43	
60-673-033	MJE2955	
60-673-034	2N3694	
60-674-003	2N5087	
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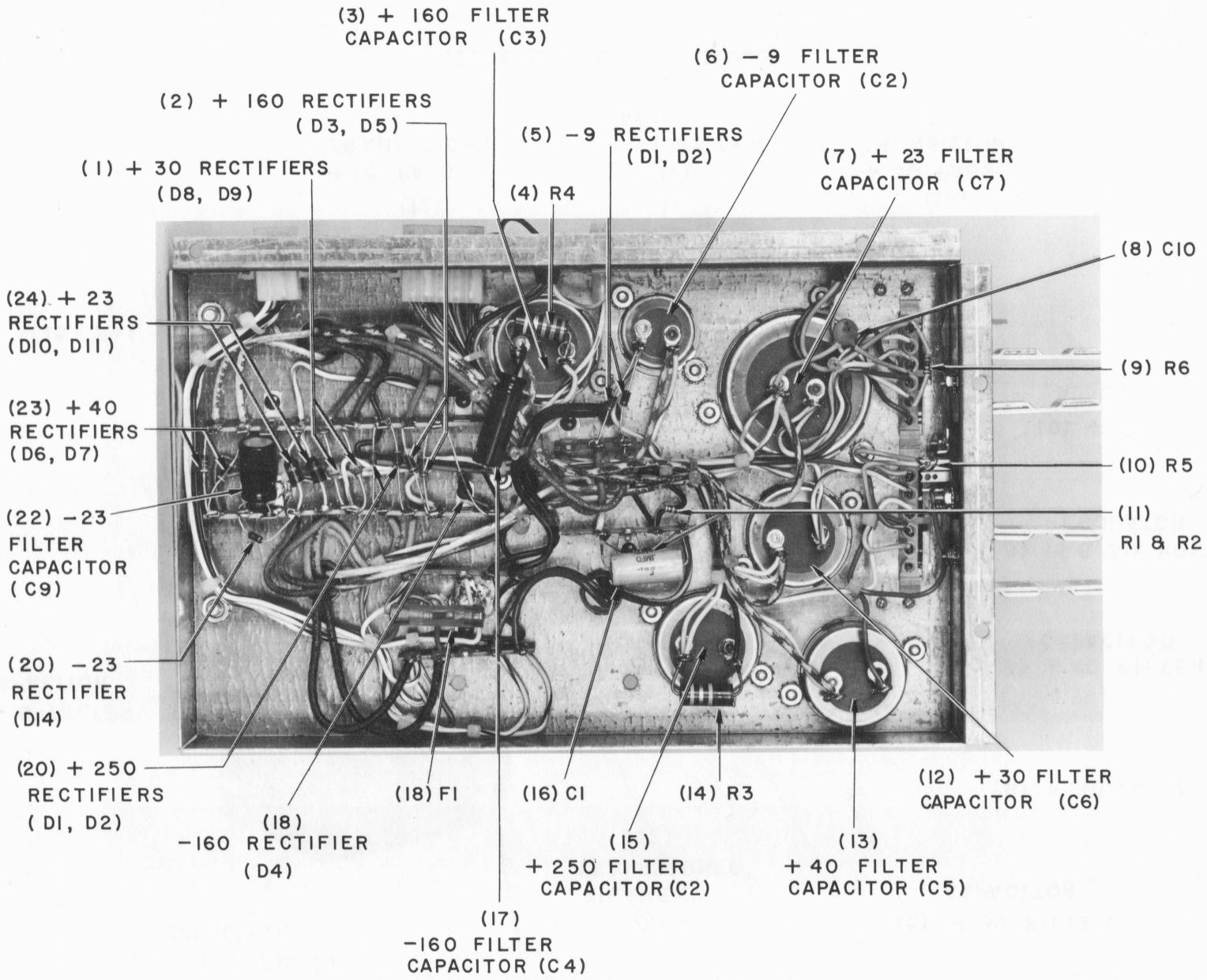

Figure 3-5. UNDERSIDE OF POWER SUPPLY ASSEMBLY

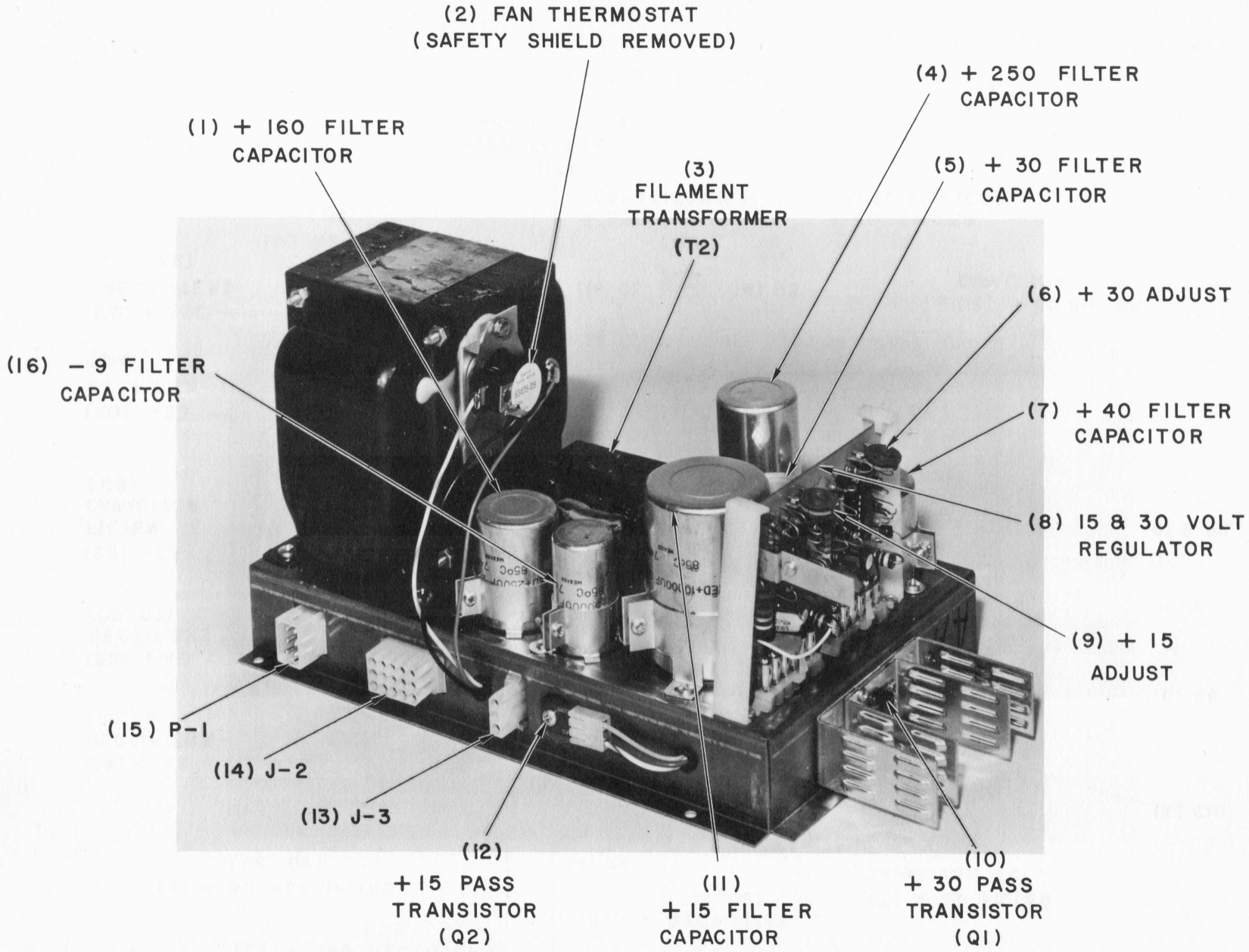

Figure 3-6. POWER SUPPLY ASSEMBLY